STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

December 8, 1982

Mr. Tom Robison, General Manager
Western Clay Company
P.O. Box 1064
Aurora, Utah 84620

RE: Division Review of Mining and
Reclamation Plan (MRP)
Redmond Limestone Quarry
ACT/041/004
Sevier County, Utah

Dear Mr. Robison:

Thank you for submitting the MRP for the above-referenced operation. The Division technical staff has completed its review of the MRP and has found it to be deficient in some respects. Please find the enclosed list which details additional information requirements as well as some points of clarification. A response to these questions is necessary to bring the MRP into compliance with the Utah Mined Land Reclamation Act of 1975, Title 40-8.

An agreement as to the form of reclamation surety Western Clay Co. would prefer will need to be reached prior to the Division approaching the Board of Oil, Gas and Mining for concurrence to issue tentative approval and for approval of the surety. Upon the Board's concurrence an Order of Show Cause will be published for a period of 30 days to solicit public comment. Provided no substantive objections to the operation are received, final approval will be issued upon receipt of the reclamation surety.

Western Clay Co. is strongly encouraged to address the Division's concerns as outlined in the review letter as soon as possible and to advise us regarding the preferred form of surety to be held by State Lands. Your prompt response will allow us to remedy your current status as an unpermitted operation.

If the Division may be of any aid whatsoever, please don't hesitate to contact me or Thomas L. Portle of my staff.

Sincerely,

JAMES W. SMITH, JR.
COORDIANTOR OF MINED
LAND DEVELOPMENT

Attachment:
JWS/TLP/mn
cc: John Blake
State Lands

MRP DEFICIENCIES

Western Clay Company
Limestone Mine
ACT/041/004, Sevier County, Utah

Rule M-3(1)(a)

The map addressing the land affected by the operations should be done to show the total number of acres involved. The operator should show the names of public roads, buildings, etc.

Rule M-3(1)(c)

The applicant should provide the scale of the maps previously submitted to comply with Rule M-6.

Rule M-3(1)(e)

The applicant apparently intended to address this section with Map 3d. Unfortunately, this map, which was referred to in the text, is absent from the submission. Please provide it on a scale as described in Rule M-6.

Rule M-3(3)

The map delineating the yearly sequential disturbance is needed (missing in plan Map 3c).

Rule M-3(1)(d)

The operator should submit a cross-section of the access roads. Procedures for drainage and erosion control methods are needed for the roads. The profile of the road grade should be provided. Please specifically discuss the reclamation of roads.

Rule M-3 and M-6

More detail is needed on Maps 8A-C (labeling of location, operation, etc.). Postmining contours should be submitted for the entire disturbed area.

Surety Estimate - Bonding

More detailed cost estimates are needed for the bond amount. As was suggested in Part 27 of the Notice of Intention, a list of costs and factors could be attached. The exact acreage and reclamation plan should be correlated with the bond estimate.

The form of surety should be discussed with the Division.

Rule M-3(2)(a), (b)

Wildlife habitat should be considered as both a pre- and postmining land-use. Revegetation species should reflect this land use.

Rule M-3(2)(e)

A more complete revegetation plan should be submitted that includes rate of seeding given in Pure Live Seed (PLS) per acre, seedbed preparation and seeding methods.

Rule M-10(12)(2)

The applicant has submitted data on the natural vegetative community composition. However, data on overall percentage of vegetative ground cover were not included. These data are necessary to determine a revegetation success standard.

A plan for monitoring of revegetated areas during the bond release period needs to be submitted. This should include a description of methods to be used, timing and duration of monitoring and methods used to determine revegetation success. Funds for such monitoring should be included in surety calculations.

It is not clear what kind of a variance from revegetation is being requested on Form MR-1. The regulations require a surface cover of at least 70 percent of the representative vegetative community to be re-established. An exception may be granted only when the operator can demonstrate through test plots that the vegetation standard cannot be achieved using all practical land treatments, including mulching, fertilization, irrigation, etc.

Rule M-10(14)

Please expand on acreage breakdown to include acreage of topsoil stockpiles, areas currently disturbed, waste and overburden and areas which have been partially or fully reclaimed.

Please provide soils information on soil KaC. Soil information is provided for type AZG_2 while much of the mine plan area is on KaC.

Will any contemporaneous reclamation be conducted?

In the interest of facilitating bond retrieval, it is recommended that either contemporaneous reclamation or test plots be employed to ascertain the treatments necessary to effect revegetation success. Please address this point. The Division would be most willing to assist in the design of test plots.

Soil Protection: What measures will be employed to achieve adequate topsoil stockpile protection? Will drainage be diverted away from piles through the use of berms? Will berms be used to retain soil? Will terraces be employed on soil stockpiles? Will mulching be utilized or will other surface stabilzing agents or measures be used? Will seed be covered with soil?

Also, please supplement the map depicting the topsoil storage locations with volumes of soil in each location. Please relate this to the sequence of development in such a way to assure that the soils stored in a given location will not be redisturbed prior to their use in final reclamation.

The above-mentioned map or narrative should indicate how drainages will be routed away from storage sites, etc. What is the anticipated final storage depth at each topsoil storage area? What will be the probable dimensions of each stockpile? What will the outslopes of the stockpiles be? Will the stockpiles be conical, flat or concave?

Rule M-10(12)

In item 23D, the applicant indicates that "road reclamation will occur in some instances." What reclamation techniques beyond scarification and seeding will be employed? Will organic matter and/or fertilizer be required. Will mulch be necessary?

Why would protection of vegetation not be required? The responses to question 25B and F are in conflict. Please clarify.

Redistribution

Prior to any reseeding efforts, soils analyses should be conducted to identify any soil physical or chemical conditions which may be detrimental to plant growth and to identify nutrients which may be deficient thus allowing a soils management program to be devised. Tests should be taken and should include pH, soil texture, EC (electrical conductivity), SAR (sodium absorbtion ratio), CEC (cation exchange capacity), OM (organic matter), available nitrogen, available phosphorous (expressed as ppm), available potassium, soluble calcium, magnesium and sodium expressed as meq/100g).

The applicant should indicate the depth of soil replacement and the acreage to be reclaimed. Further, the applicant must indicate the volume of available soil to demonstrate that adequate soil exists to all reclamation. Should a deficit of soil be established, please describe where substitute materials will be obtained or provide other measures to remedy this problem.

The applicant states in 23C.1 that a four inch topsoil replacement depth is adequate. This is questionable. The applicant must demonstrate that this replacement depth is adequate through the use of test plots.

Rule M-3(2)(c)
M-10(6)

The application discusses "reject material" but does not allude to its specific nature. Please provide data to establish that no adverse effects on revegetation will occur. This may be addressed by providing data on its EC, pH and size. How much of this material will be available for "reclamation backfill"?

Rule M-10(2)(b)

The Division must receive documentation of approval to dump trash at the minesite from the Utah Bureau of Solid and Hazardous Waste.

(5) Please provide a copy of the approvals obtained for "fencing and berming of highwalls." Also, provide photos and/or a narrative to display the results of past performance of this technique.